This listing of claims will replace all prior versions and listings of claims in

the application:

Listing of Claims:

1(Currently Amended). A computing system comprising:

a processor having a data/control bus interface;

a data/control bus implementing one or more device communication

channels:

5

10

15

a mass storage device having an interface for communicating mass

storage transactions;

a data memory coupled to and shared by both the processor and the

mass storage device;

a mass storage device having an interface for communicating mass

storage transactions; and

a controller having a memory interface coupled directly to the data

memory and a mass storage interface coupled directly to the mass storage

device's interface and operable to conduct mass storage transactions between

the data memory and the mass storage device and to arbitrate access to memory

locations within the data memory between the data/control bus and the mass

storage device.

2(Original). The computing system of claim 1 wherein the data memory

is coupled to the processor by a memory bus operating independent of the

data/control bus.

3(Original). The computing system of claim 2 wherein the controller

comprises a memory access controller coupled to the processor, the data

2

Appl. No: 09/943,242

Amdt. Dated: July 18, 2005

Reply to Office action of April 27, 2005

memory, and the mass storage device and operable to arbitrate accesses to the data memory between the mass storage and the processor.

4(Cancelled).

5(Original). The computing system of claim 1 wherein the data memory is coupled to the data/control bus.

6(Cancelled).

7(Original). The computing system of claim 1 further comprising storage controller processes and application behavior processes implemented using the processor.

8(Cancelled).

9(Cancelled).

10(Cancelled). The computing system of claim 1 wherein the processor implements data structures storing physical geometry information about the mass storage device.

11(Cancelled).

12(Original). The computing system of claim 1 wherein the controller is integrated with the processor on a single integrated circuit chip.

13(Cancelled).

14(Cancelled).

15(Cancelled).

16(Cancelled).

Appl. No: 09/943,242

Amdt. Dated: July 18, 2005

Reply to Office action of April 27, 2005

17(Currently Amended). The computing system of claim 1 wherein the

mass storage device comprises:

a spinning disk having magnetic storage media provided on at least one

surface:

5

10

5

a head for accessing data stored in the magnetic storage media;

an actuator mechanism for moving the head relative to the magnetic

storage media in response to commands;

a servo controller coupled to receive requests transferred from the data

memory by the controller and configured to generate the commands to the

actuator mechanism.

18(Original). The computing system of claim 17 wherein the mass storage

device's interface is implemented by the servo controller and implements a

physical interface to the data/control bus and a physical interface to the head and

actuator mechanism.

The computing system of claim 1 wherein the 19(Currently Amended).

computing device system comprises a set-top box including processes for

implementing audio/video behaviors in the processor.

20(Currently Amended). The computing system of claim 1 wherein the

computing device system comprises a network appliance having a network

controller coupled to the data/control bus.

21(Previously Presented). The computing system of claim 1 wherein the

mass storage device comprises an optical storage device.

22(Previously Presented). The computing system of claim 1 wherein the

mass storage device comprises a magneto-optical storage device.

4

Appl. No: 09/943,242 Amdt. Dated: July 18, 2005 Reply to Office action of April 27, 2005

Claims 23-31(Cancelled).